

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:2051

ANSWERED ON:02.12.2002

RESEARCH CENTRES PROJECTS UNDER ICAR IN TRIBAL AREAS

RAMDAS ATHAWALE

Will the Minister of AGRICULTURE be pleased to state:

- (a) the details of research centres and projects running under the auspices of Indian Council of Agricultural Research in Maharashtra and other States particularly in the tribal dominated areas location-wise;
- (b) the details of amount allocated by the Union Government alongwith the details of amount spent by them during the past three years centre-wise and project-wise;
- (c) the details of achievements made by these centres, State-wise; and
- (d) the extent to which these centres influenced agricultural production in the country during the said period?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI HUKUMDEO NARAYAN YADAV)

(a) & (b): The details are given in Annexe-I.

(c) The details are given in Annexe-II.

(d) The details are given in Annexe-III.

Annexe-I

The details of Research Centres and Projects running under the auspices of ICAR particularly in tribal dominated areas alongwith the amount allocated and spent during the last three years

ANDHRA PRADESH

Sl. No. Name & Address of
Research Centres/KVKs (Rs. lakh)

Amount allocated Amount Spent

1999-00 2000-01 2001-02 Total 1999-00 2000-01 2001-02 Total

1. Krishi Vigyan Kendra,
Behind M.R.O. Office,
Kotha, Madanpur,
Mahboobnagar (AP) 7.33 10.55 18.10 35.98 7.33 10.55 18.10 35.98

2. Krishi Vigyan Kendra,
Gadipalli-508201,
Nalgonda (AP) 9.09 31.37 34.35 74.81 9.09 31.37 34.35 74.81

3. Krishi Vigyan Kendra,
C/O Bhagya Tula
Charitable Trust,
Yellamanchily,
Vishakhapatnam
-531005 (AP) 32.60 14.80 33.55 80.95 32.60 14.80 33.55 80.95

4. Krishi Vigyan Kendra,
Malyal Farm, Village
Malyal, Warangal-
506101(AP) 17.29 15.17 16.35 48.81 17.29 15.17 16.35 48.81

TOTAL 66.31 71.89 102.35 240.55 66.31 71.89 102.35 240.55

CHATTISGARH

1. Krishi Vgyan Kendra,
Sarguja 20.23 14.95 26.55 61.73 20.23 14.95 26.55 61.73

2. Krishi Vigyan Kendra,
Animal Husbandry
Science, Gokulan,G.E.
Road, Anjora, Durg
- 491001 15.41 18.45 24.55 58.41 15.41 18.45 24.55 58.41

3. Krishi Vigyan Kendra,
Via. Dimrapal,Jagdarpur,
Bastar-494001 0 10.00 14.55 24.55 0 10.00 14.55 24.55

TOTAL 35.64 43.40 65.65 144.69 35.64 43.40 65.65 144.69

GUJARAT

1. Krishi Vigyan Kendra,
Regional Hill Millet
Research Station,
Waghai, Dangs(Guj.) 27.10 19.05 34.50 80.65 27.10 19.05 34.50 80.65

2. Krishi Vigyan Kendra,
P.O. Ambeti Ashram,
Valsad(Guj.) 6.77 11.80 17.90 36.47 6.77 11.80 17.90 36.47

3. Krishi Vigyan Kendra,
Bharauch 7.60 9.50 10.40 27.50 7.60 9.50 10.40 27.50

4. Krishi Vigyan Kendra,
Mangal BhartiGolagamadi,
Golag Mandi, Vadodara 6.07 9.30 10.50 25.87 6.07 9.30 10.50 25.87
TOTAL 47.54 49.65 73.30 170.49 47.54 49.65 73.30 170.49

HIMACHAL PRADESH

1. Krishi Vigyan Kendras,
P.O. Sultanpur, Baloo,
Chamba-176314 58.67 34.34 27.75 120.76 58.67 34.34 27.75 120.76
2 Krishi Vigyan Kendra,
Sharbo at Rekong Peo,
Kinnaur 25.49 27.83 28.30 81.62 25.49 27.83 28.30 81.62

TOTAL 84.16 62.17 56.05 202.38 84.16 62.17 56.05 202.38

JHARKHAND

1. Indian Lac Research
Institute, Ranchi 120.00 115.00 105.0 340.00 82.92 85.19 105.00 273.11

2. Krishi Vigyan Kendra,
P.O. Jagannathpur, West
Singhbhum-833203 15.39 19.10 16.45 50.94 15.39 19.10 16.45 50.94

3. Krishi Vigyan Kendra,
P.O. Morabadi, Ranchi
- 834008 8.75 7.05 11.85 27.65 8.75 7.05 11.85 27.65

TOTAL 144.14 141.15 133.30 418.59 144.140 141.15 133.30 418.59

MADHYA PRADESH

1. Krishi Vigyan Kendra,
Reg. Agril. Res. , St.,
Chandagaon, Chhindwara-
480001 19.96 20.45 24.82 65.23 19.96 20.45 24.82 65.23

2. Krishi Vigyan Kendra,
JNKVV Farm, Jhabua
-457661 17.04 12.49 18.88 48.41 17.04 12.49 18.88 48.41

3. Krishi Vigyan Kendra,
Goviana Site Post Box-7,
Sidhi-486661 17.17 19.45 23.07 59.69 17.17 19.45 23.07 59.69

4. Krishi Vigyan Kendra,
College of Agril.,
Warwadi Farm, East
Nimar (Khandawa) 13.48 18.45 18.81 50.74 13.48 18.45 18.81 50.74

5. Krishi Vigyan Kendra,
Kathi Bagh, Rajgargh 0 13.45 15.18 28.63 0 13.45 15.18 28.63

6. Krishi Vigyan Kendra,
Badagaon Block- Kornapur,
P.O. Pala Balaghat
- 481115 33.84 19.05 7.41 60.30 33.84 19.05 7.41 60.30

7 Krishi Vigyan Kendra,
Joara, Kalukeda,
Ratlam-457340 8.64 17.62 26.05 52.31 8.64 17.62 26.05 52.31

TOTAL 110.13 120.96 134.22 365.31 110.13 120.96 134.22 365.31

MAHARASHTRA

1. Krishi Vigyan Kendra,
C/o Satpura Vikas Mandal
Pal, Raver, Jalgaon-
425508 17.19 20.55 24.55 62.29 17.19 20.55 24.55 62.29

TOTAL 17.19 20.55 24.55 62.29 17.19 20.55 24.55 62.29

MEGHALAYA

1. ICAR Research Complex
for NEH Region 302.09 319.82 553.93 1175.84 302.09 319.82 553.93 1175.84

TOTAL	302.09	319.82	553.93	1175.84	302.09	319.82	553.93	1175.84
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ORISSA

1. Krishi Vigyan Kendra,
Regional Res. Station,
Semiliguda, P.Box 10,
Sunabeda-763002 Koraput
18.17 17.73 25.55 61.45 18.17 17.73 25.55 61.45
2. Krishi Vigyan Kendra,
Reg. Res. Station,
Judia Farm, P.O.
Keonjhar
17.73 16.99 24.55 59.27 17.73 16.99 24.55 59.27
3. Krishi Vigyan Kendra,
P.O. Devog via Singila,
Baliapal, Balasore-
756026
22.07 19.675 25.55 67.295 22.07 19.675 25.55 67.295
4. Krishi Vigyan Kendra,
Reg. Res. Station, NARP
Campus Bhowani Patana,
Kalahandi
18.96 18.45 31.55 68.96 18.96 18.45 31.55 68.96

TOTAL	76.93	72.845	107.20	256.975	76.93	72.845	107.20	256.975
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RAJASTHAN

1. Krishi Vigyan Kendra,
Near Badat Mat, Sastri
Colocy, Dungarpur-
314001
22.22 36.15 25.40 83.77 22.22 36.15 25.40 83.77
2. Krishi Vigyan Kendra,
Borwat Agril. Research
Station, Banswara-
327001
25.07 19.90 25.30 70.27 25.07 19.90 25.30 70.27
3. Krishi Vigyan Kendra,
Badgaon, Udaipur -
313 001
22.06 21.80 27.40 71.26 22.06 21.80 27.40 71.26

TOTAL	69.35	77.85	78.10	225.30	69.35	77.85	78.10	225.30
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Annexe-II

The details of achievements

The consolidated achievements made by these Centres are as under :

Agricultural Research Centres

These centres have greatly helped in efficient utilization and conservation of the natural resources for improving agricultural productivity in Maharashtra as well as in other States and tribal areas of the country. The input-use efficiency of water, fertilizers, tillage and other agricultural inputs have been greatly improved and the cost of cultivation per unit of the produce has been reduced. The activities have helped in efficient utilization of the rain, surface and ground water resources as well as recharge of the ground water. Drip and micro sprinkler technology in Maharashtra have greatly helped in improving the productivity of horticulture and other vegetable crops. Similarly, the alternate farming systems in the North East Hill Region has helped in conservation of the natural

resource and biodiversity, improving agricultural productivity and providing enhanced opportunities for supporting livelihood systems of tribals in the North East Hill Regions.

More than three hundred fish farmers were imparted training in small scale fishculture technology. Yield from their ponds increased from 200 to 1000 Kg per hectare.

Krishi Vigyan Kendras

During the last three years a total of 43 thousand courses were organized for the benefit of 10.36 lakh farmers and farm women, 9 thousand courses were organized for the benefit of 1.7 lakh rural youths, and 4.4 thousand courses were organized for the benefit of 1.05 lakh in-service personnel. Frontline Demonstrations were organized benefiting 61833 farmers. 4613.7 tonnes of cereals, 474.2 tonnes of oilseeds, 958.7 tonnes of pulses, 218 tonnes of vegetable seeds were produced, besides 1.54 lakhs of saplings/ seedlings of fruit/ vegetable/ ornamental plants/ forest species.

ICAR Research Complex for NEH Region

@ Soil and water conservation practices in mountainous watersheds reduced runoff from 42 to 14% and the soil loss from 1 to 2 t/ha.

@ Alternate farming systems to shifting cultivation were developed in northeast region resulting into higher production per unit area and conservation of soil and water resources. These technologies help in moderation of floods in the plains and increase cropping intensity and productivity in the hills.

@ Floriculture, organic farming, rabbit and pig rearing and other commercial agriculture activities have been provided with a scientific back up.

@ Methods have been devised for control of diseases and insect pests of the crops and animal population of the NEH Region.

@ Different agro-forestry systems such as agri-silviculture, agri-silvi-horticulture, agri-horticulture, silvi-pasture systems have been developed and evaluated for NEH Region

Indian Lac Research Institute (ILRI), Ranchi

@ Studies on lac cultivation under intercrop system were carried out at ILRI, Ranchi. Technology developed for integration of different agricultural crops with lac culture on palas trees occurring scattered on sloppy degraded upland in Chhotanagpur plateau has successfully been tested in the Institute farm and found to increase the productivity of land approximately to the tune of 8, 10 and 5 q/ha in case of ragi, upland paddy and soybean, respectively grown as intercrops under rain-fed conditions in addition to the normal sticklac yield of 4-5 q. The technology has been found not only suitable for increasing the productivity but also in improving the soil fertility and protecting the soil from erosion.

@ Utilization of inter-spaces between the host plants in the mixed plantation of bhalia and galwang by growing turmeric, has successfully been tested and has been found to generate an additional revenue of approximately Rs.6,000-7,000/ha to the normal 20,000-25,000/ha/year from lac.

@ An efficient and indigenous device for lac-insect pest management has been developed at ILRI, Ranchi. Exploiting the size gradient and phototactic nature of adult insects, a simple device has been developed to separate predators, beneficial and inimical parasitoids of lac insect *kerria lacca* (kerr). The used up broodlac is kept inside a container and a unit fitted on this is able to sort out beneficial parasitoids namely, *Bracon greeni*, *Apanteles tachardiae*, *Pristomerus sulci* and *Brachymeria tachardiae* automatically into a single chamber from mixed population of predators, inimical and beneficial parasitoids associated with lac to the extent of 69, 60, 100 and 100%, respectively. These insects can be released to augment the natural population of useful parasitoids (biological control agent) and check lac associated predators. The device uses locally available materials and is very cheap and easy to assemble. It does not require any skill to operate. The farmers themselves can participate in programme of natural pest control. More than one unit can be fitted into a very large container.

@ A trivoltine quick growing lac insect species has been discovered from Sarat (Distt. Mayurbhanj, Orissa) growing wildly on (*Schleichera oleosa*) kusum. This insect completes three generations in 350 to 355 days at its native place and 370 to 380 days in Ranchi conditions, as against only two generations recorded so far, in existing lac insect on this host in Bihar, M.P. and W.B. Studies have revealed that new insect differs morphologically, ecologically and biologically from trivoltine insects, reported earlier on jalary and Raintree from Mysore (Karnataka) and Amarsi (W.B.), respectively. Thus, it is a first record of trivoltine lac insect from conventional lac host. Owing to its high multiplicity per year (9 times higher than the conventional lac insect on this host), the insect not only holds promise for quick production of lac but also competes well against most of the inimical insects and escapes damage done by them.

@ An economical varnish based on dewaxed lac in spiritless solvents along with an accelerator has been developed for wood. The resulting film is heat resistant and water resistant. It could be applied either by brush or spray. Metal lacquer based on modified lac with 10-15 percent synthetic in spiritless solvent has also been developed for coating tin metal surfaces.

Annexe-III

THE DETAILS OF THE CENTRES INFLUENCED AGRICULTURAL PRODUCTION IN THE COUNTRY DURING THE SAID

Crop Science

Research efforts in the region have led to development of improved varieties and technologies for increasing production and productivity in the region and also benefit the farmers by increasing their income. Breeder seed is produced to make available quality seed to the farmers. Farmers also benefit from the training programmes on disease and pest control, bee keeping and enhanced awareness on pesticide residues.

Natural Resource Management

The technologies have helped in popularizing cultivation of groundnut and pigeonpea. Agroforestry systems developed have helped to increase productivity of sloppy lands by replacing shifting cultivation. Rejuvenated old orange orchards are becoming more profitable. Technology for piggery, rabbit and paddy-cum-fish culture technology have helped in employment generation and more income.

Animal Science

- The population of Yak & Mithun the two rare species of livestock are constantly declining. The study conducted on NRC (Yak), NRC(Mithun) and NRC (Pig) will help in checking this decline
- NRC (Pig) in Guwahati is the headquarter of pig research in the country. NE Region will have the benefit of research data of the whole country for improving the present pig rearing practices of local farmers.
- The research conducted so far helped in improving technology of Mithun & Yak farming by improved feed, reproduction & health management practices.
- Besides direct benefit through improved production practices of Yak, Mithun & Pig, farmers are also trained in other allied activities. These are by integrating piggery & poultry production with Yak & Mithun farming.

Engineering

- The benefits being made available to the local population through all the centres of AICRPs located in the NEH Region include development of appropriate designs of improved agricultural tools and implements, post harvest equipment, renewable energy gadgets, which are efficient and economical and use of plastics in agriculture to mechanize various crops production activities in the region. Their large scale use will help the farmers to increase their production and reduce cost of production. Need based farm tools and implements, post harvest equipment, solar gadgets, biogas digesters, green houses etc. developed/identified by the centre were manufactured and supplied to the farmers to mechanize their farm operations. This has generated good awareness about improved implements amongst the farmers and demand of such machinery is increasing.
- Demonstration of use of clarificants in making jaggery has shown that the quality of jaggery was improved and the farmers are now adopting the use of clarificants in jaggery making.

Fisheries

- Due to technology demonstration, HRD programmes and monetary assistance, the aqua farmers in the region have been able to enhance fish production.
- With the establishment of the hatchery the seed of Chocolate mahseer, can be made available to the local fish farmers and also used for ranching in the local water bodies for conservation.

Education

- AICRP has successfully developed a nutritional guide as a powerful tool for dietary counseling among rural families and also has provided interventions in the form of food products rich in Vitamin A and Iron.
- Child Care and Growth Norms of Rural Children and development of cost effective farm crèches for rural children
- Drudgery Reducing women friendly and cost - effective technologies of farm and Home activities developed
- Agro & Animal based natural dyes and fibres identified for economic activities.

Extension

- During the year 2000-01, 375 training course were organized benefiting 8869 farmers, 224 training courses were organized for 4931 rural youths, and 24 programmes were conducted to train 728 in service personnel. During the year 606 oilseed and 581 pulse crops front line demonstrations were conducted covering 108 ha and 104 ha respectively.
- The ICAR have also established one Trainers Training Centre (TTC) and a total of 48 inservice extension personnel were trained.